

NOTE ON *ORIOLOUS AFFINIS*, GOULD.

BY. E. P. RAMSAY, F.L.S.

Mr. R. B. Sharpe, † (and probably other ornithologists as well), seems to doubt the existence of a third *Oriole* in Australia—*O. affinis*, Gould. I can only assure Ornithologists that in my opinion this is a good species, and fairly described by Mr. Gould and that it has nothing whatever to do with the young of *O. flavicinctus*, as supposed by Mr. Sharpe. This bird is smaller than *O. viridis*, the bill larger, the wings shorter, the tarsi smaller, the breast duller, less olive-green on the chest, the striæ continued on to the flanks and abdomen, no striæ on the throat, which is greyish washed with olive-green; more grey on the primaries, the secondaries and coverts with a narrower white margin; and a small spot white only, on the inner webs of the tail feathers at the tip. Total length from the tip of bill to tip of tail in the flesh 9·4 in., wing 5·5, tail 3·9, tarsus 0·7 in., bill from forehead 1·2, from gape 1·3.

Hab. Gulf district, N. W. Queensland, and Dawson River district, &c.

The eggs of this species are similar to those of its ally *O. viridis*, but smaller and not so rich in colour, they are of a very light creamy buff with dark olive-brown spots, and a few of a pale lilac or slaty tint, appearing as if beneath the shell; the spots are sprinkled all over the surface rather widely apart.

Length A. 1·3 x 0·9; length B. 1·22 x 0·88.

A SOLUTION FOR PRESERVING LARGE VERTEBRATA FOR
ANATOMICAL EXAMINATION.

BY N. DE MIKLOUHO-MACLAY.

Ten days ago I found in a German Newspaper a Report of a meeting of the Anthropological Society of Berlin, held on the

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19th of March, 1881, in which was stated, that Prof. R. Virchow informed the members present at the meeting that the specimen of the *Homo australis* "Umbelah," (alias Johny Campbell), sent by me from Brisbane in October last year in a conservative fluid, has safely arrived in Berlin and in *good* condition. This will give Prof. Virchow, or his pupils, the opportunity to make valuable anatomical dissections of this interesting specimen of the Genus *Homo*.

This happy result, which I hardly had dared to expect, induces me to give here the proportions of different ingredients of this solution, which is different from that of Mr. Wickersheim of Berlin. The elements of the Wickerheimer Fluid are :

Alum	100 Kilo.	Arsenious Acid ..	10 Kilo.
Com. Salt ..	25	Boiling Water ..	3000
Saltpetre ..	12	Glycerine ..	1 litre.
Carbonate of Potash	60	Methyl. Alcohol..	1

I have used for my preservative fluid :

4lb White Arsenic	} Disolved in 40 gallons of water.
2lb Carbon. of Potash	
3lb Corrosive sublimate.	
40lb Com. Salt	

Speaking of this new solution, I must mention with thanks, that Mr. R. H. Staiger, the late Gov. Anal. Chem., has assisted me with his theoretical and practical experience. I had also some advice from Mr. A. C. Gregory, C.M.G.

I have to add: that before I put the body in this solution I had, cutting the covering of the abdomen in the Linea alba, removed the tractus intestinalis from the cardia to the rectum, leaving heart, lungs, liver, kidney, etc., etc. "in situ." I injected also about 40 lb of the Wickersheimer Fluid in the Aorta descendens, partly as a preservative, but chiefly in order that the glycerine, one of the elements of the fluid, might keep the members

of the body supple. The body was not put in the liquor immediately after death. The first afternoon I had only time to take the brain out, the second day I removed the tractus intestinalis, made the injections, and only after 48 hours was the specimen put in the solution. The cold weather (16 and 17 Aug.) aided by a free use of a wash of the Wickersheimer Fluid prevented all signs of decomposition. But after remaining in my solution for 10 or 14 days I observed that many parts of the body were swollen. To assist the penetration of the preservative fluid under the skin and prevent further decomposition, hundreds of acupunctures were made, whereafter the swelling was soon reduced.

I kept the body two months in the solution and as I was perfectly sure that the specimen was well preserved, I decided to send it to Prof. Virchow, and hope that this consignment will add a few facts to our knowledge of the Comparative Anatomy of the Races of Mankind.

After the specimen had been sent to Europe, I got a letter from Prof. Virchow (dated 27th Nov., 1880) in which he tells me that he himself did not believe that the Wickersheimer Fluid, while excellent for a cold climate, was suitable for use in tropical and subtropical regions; he advises me, in preserving such specimens as bodies of men: 1 to take the tractus intestinalis out and to preserve it in alcohol. 2 to inject a solution of Chloride of Zinc in the carotids and to put the brain in alcohol. 3, to inject also Glycerine and Carbolic Acid in some of the principal arteries, to keep the members movable. 4, to preserve the body in salt. He does not believe that Corrosive sublimate is of importance, but thinks, that Arsenic is good for preventing the formation of Fungi.

Dr. Hector whom I have seen lately in Melbourne has told me, that common sea-water after it has been boiled and filtered is an

excellent preservative solution for many, principally marine animals.

TEMPERATURE OF THE ROCK IN THE MAGDALA SHAFT, VICTORIA.

BY N. DE MIKLOUHO-MACLAY.

Having ascertained that no observations of the temperature of rock have yet been made in the shaft of Magdala (the deepest mine in Australia) and being able to spare two days during my last stay in Melbourne, I went on April 4th to Stawell, provided with four thermometers, which Mr. R. L. T. Ellery, the Government Astronomer of Victoria, was kind enough to lend me for this occasion.

I do not find it necessary to mention here all the details of this excursion, and will give only the results of my observations; but I have to observe, that two holes of about 8 feet deep and $1\frac{1}{2}$ inch in diameter were drilled in the rock (blue schist) on purpose to sink the thermometers into the rock, in the depth of 1,662 feet and 2002 feet, from the surface, while a third thermometer was introduced in the last rod of the diamond drill (2759 feet), which was not at work during the night hours.*

Two of the thermometers were read the first time after remaining in the rock for seven hours, the second time after eight hours; the third thermometer in the diamond drill only once after remaining in the rock for also eight hours.

The results are near and interesting enough, but would be more correct *i. e.*, more valuable, if selfregistering thermometers, which I could not obtain in Melbourne, had been used.

* The diamond drill has since ceased work in the Magdala Shaft, having bored 521 feet below the bottom of the shaft, or to a total depth of 3,013 feet, or 2,232 feet below the level of the sea.